DOCUMENT RESUME

ED 121 768 SP 010 032

AUTHOR Sieber, Sam D.
TITLE Structure Versus Function in Models of Educational Change--A Dissenting Opinion.
PUB DATE Mar 76
NOTE 23p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS Bureaucracy; Change Agents; *Change Strategies; Educational Administration; *Educational Change; Educational Development; Educational Needs; Educational Philosophy; Educational Planning; *Extension Agents; *Problem Solving; Research and Development Centers; *School Personnel; School Planning; Schools; Technical Assistance

ABSTRACT

The most popular and traditional approaches to educational change have been through formal organizations. These organizations, by their very nature, are geared to treat typical cases and are efficient, but their effectiveness is questionable. Current models of change impose a certain rigidity on the situation which seems to defeat the professed goal of giving individualized service and developing personal capacities. Dissatisfaction with existing models on the grounds of inflexibility prompted an evaluation of a USOE-NIE program consisting of extension agents. It was clear that the key to the success of this experiment lay in its non-formal, non-specialized nature, making it possible to circumvent the organizational constraints and red tape of local and state educational systems. Two extension agents in each of two states and three agents in a third state were employed full time to visit schools within specified target areas and to help clients identify and articulate their needs. The agents referred each need or request to a retrieval staff located in the state education agency who performed computer or manual searches of ERIC and other, more standard, resources. When appropriate, the agent helped the client interpret or adapt the information, appraise its applicability, consider needed steps for use or implementation and repeat the process when needed. Few of the initial conceptions of how the agents were to perform their unprecedented roles were borne out in practice. The agents had to develop a repertoire of very different skills and to learn when to activate them. A great deal of qualitative o ervation and statistical data are providing mounting evidence that the best way to serve the needs of educators in behalf of enlightened change is to adopt a highly flexible, inter-personal approach with a bare minimum of role preconceptions and organizational props. (DMT)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED121768

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

STRUCTURE VERSUS FUNCTION IN MODELS OF EDUCATIONAL CHANGE —

A Dissenting Opinion

Sam D. Sieber

100 Nazareth, Red Hook
St. Thomas, USVI
00801

March, 1976

SP 010 032

Structure versus Function in

Models of Educational Change —

A Dissenting Opinion

A persistent dilemma confronts the so-called change models of education. Although this dilemma is implicit in almost every current statement about the handling of the diffusion and implementation process, it seems regularly to escape detection. The dilemma is posed by an existentialist conception of the educator (sometimes referred to as a "user orientation"), on the one hand, and a bureaucratic conception of how to go about reaching and influencing him, on the other.

The existentialist image of school personnel stresses the role of personal values, goals, and needs of the individual in his unique setting. In a paper that outlines a comprehensive problem-solving model, Bargar (1975) makes an assessment that is enjoying wide currency in the field today.

> Each within his or her own sphere is faced with a given range of problems; ... teachers are key decision makers for what actually happens in classrooms. What they perceive, what they value, what they decide and how they act are critical. Development in the classroom thus requires development in the teacher. ...innovations will be employed successfully only when related realistically to the awareness of teachers of their objectives and needs.

Thus, it is widely claimed that only by enhancing the local capacity for problem-solving will individuals, groups, or organizations be motivated and able to engage in educational reform. (For some writings that reflect this viewpoint, see Havelock and Havelock, 1973; Schmuck and Miles, 1971; Fullan, 1972; NIE, School Capacity for Problem Solving, 1975.)

In sharp contrast to this outlook, although often found allied with it in the writings of change strategists, is the bureaucratic perspective. This perspective views the practitioner as in need of, and ultimately responsive to, a re-structuring of roles and agencies. Current models of change envisage this new structure as consisting of formal linkages to resources, information, and technical assistance; training programs in problem-solving, communication, decision-making, information retrieval and a host of other skills; task forces and committees for the planning, management, and coordination of dissemination networks; and scheduling and budgeting of local change processes. Admittedly there has been a salutary shift in recent years from the super-structure of the R&D model to a more locally based infra-structure. But a bureaucratic perspective is no less evident in these more localized models.

The question that now arises is the following: What will become of the educator with his special problems, values, and goals in the midst of all these organizational paraphernalia and role definitions? It is my guess that he will become coopted, type cast, or simply ignored. For it would seem to be extremely difficult to establish schedules, committees, training programs, and routinized linkages which preserve the phenomenological integrity of the individual and which answer his needs in a way that engages commitment and contributes to personal growth. An organizational structure is not tailored to the needs of individuals, but to broad categories of needs. It is the function of all organizations to provide treatment to <u>typical</u> cases; which is precisely why an organization

is regarded as more efficient than an individual dealing with other individuals on a one-to-one basis, as in the doctor-patient relationship; but its effectiveness is quite another matter. In short, current change models, including even the problem-solving approach, impose a certain amount of managerial rigidity on the situation that would seem to defeat the professed goal of giving individualized service and developing personal capacities.

The issue that I am raising is perhaps more academic than real, for it is very unlikely that school personnel will assent to the managerial efforts of well-intentioned change agents. Practitioners are no more inclined to embrace a new change oriented structure than they are to welcome any new job related burdens, organizational priorities, or status-threats from experts (local or otherwise). Model builders in the dissemination and implementation field consistently overlook the fact that teachers have a great many roles to play that have little to do with educational practice, such as keeping parents at bay, appeasing the clerks in the central office, working in teachers associations or unions on bread-and-butter issues, managing the traffic in a classroom or school building, or acquiring old fashioned resources like chalk, chairs, baseballs, and art supplies. These concerns are as much a part of the teacher's world as his instructional values and goals. And it seems fruitless to erect an elaborate structure on the basis of a classroom role that is but one of a wide repertoire of competing roles, and to expect teachers to participate wholeheartedly in that structure. (The same point, incidentally, can be made about professors and state

agency personnel who are supposed to function as "resource teams" in schools.) In short, as we have pointed out elsewhere, (Sieber, 1968), school personnel are quasi-professionals; they have much more on their minds than professional classroom performance. This suggests that problem-solving structures which only add to existing organizational duties and constraints will fare poorly even when implemented.

The lack of realism in current change strategies is reflected in another way: the naive belief that school personnel seek information or other resources in order to improve educational practice. Perhaps of far greater importance are the symbolic functions of knowledge utilization. These functions include legitimation of current plans or practices, cooling out of critics, justification for failure (e.g., research on learning disabilities of minority children), status enhancement within the local setting, group integration, and so forth. And it is conceivable that local and state knowledge utilization structures only reinforce these uses through their reliance on customary roles and personnel.

These observations raise an interesting point, namely, that even the problem-solving advocates seem to have little interest in the real problems and needs of educators. Indeed, such needs as those mentioned above are relegated to the category of "constraints" on how the rational educator would like to behave. In the problem-solving literature in particular, needs or problems are glibly referred to without regard to their urgency, their frequency, or their diversity, as if these matters were irrelevant to problem-solving. Similarly, resources are

referred to without regard to quality, type, quantity, relevance, etc. (Reflecting this tendency to spurn substance is the complete separation within the National Institute of Education between the School Capacity for Problem Solving Group and the Dissemination and Resources Group.) Regarding the sheer quantity of needs to be found in any school, not even a miniscule proportion can be dealt with by means of a local management structure. In order to determine which problems will be addressed, it becomes necessary to establish "criteria" and "priorities." In practice, then, one or a few problems will be picked which the new structure is best equipped to handle, and the rest will either be ignored or referred to other agencies. This procedure runs counter to the idea of giving individual attention to needs, tailoring solutions to the problems of a significant number of educators, and helping practitioners to cope better in the future.

Needs and problems also differ greatly in nature, urgency, scope, complexity, and so forth. Therefore, some require "resource teams" and some don't; some require "diagnosis" and some don't; some require "facilitators" and some don't; some require "R&D" and some don't. But none of the existing change models take into account the great variation in individual needs, and the numerous conditions that dictate one or another type of intervention. Thus, it is often implied that <u>all</u> of these approaches should be brought to bear on <u>every</u> problem; when what is needed, in fact, is a "contingency model" which takes into account such matters as the motivation and skills of the client, the type of need, the

complexity and urgency of the solution, and so forth. (For a full theoretical exposition of the contingency model, see Louis and Sieber, forthcoming.)

Another source of rigidity in the change models of today is the assumption that a particular sequence of events occurs in an innovative process. This leads to the idea that a strategy which facilitates movement from one stage to the next should be pursued. Whether this sequence involves Bargar's (1975) route from "problem analysis" to "maintaining and reviewing," or the more famous stages of Havelock (1969) or Rogers (1962), there is the assumption that people always proceed from one stage to another in a more or less orderly fashion. This linear assumption has little basis in fact, and indeed research has yielded many situations to the contrary. A genuine problem might not appear until a new practice has been installed simply because it was popular; a need might not be felt until a person becomes aware of a publication about new practices; a solution might be embraced prior to the acquisition of resources for problem-solving; and so on. And equally important, these stages are constantly reiterating themselves in the same innovative effort. The habit of imposing a single linear sequence on the innovative process fosters additional rigidities in our models of change, rigidities that are antithetical to claims that these models are responsive to concrete situations and individual needs.

The kind of planning or modelling that we have been discussing might be characterized as <u>abstract structuralism</u>, a style of thinking which is rampant in professional education and which probably results only in

administrative ritual and turned off school personnel.

Conceivably what is required is an arrangement that is so flexible in adapting to needs and to individuals that it is virtually invisible — which means an arrangement not based on concern for organizational neatness, categorization of needs, or administrative accountability, but based instead on personal, case by case adaptation to the needs expressed by individual clients. It is tempting to draw an analogy to the private medical practitioner, but this would be very misleading. Patients voluntarily go to doctors for help; the problem is often obvious and pressing; the patient is very motivated to solve the problem; time consuming diagnosis is tolerated and even desired when the cause is not obvious; the doctor is revered for his expertise; the patient role is not imbedded in an organization; the patient is a layman being treated by a professional; and the results of treatment are readily discerned. None of these features apply to the relationship between specialists and educators; and this is the reason that the diagnostic role of medical practice will not work in education.

Nevertheless, it is worthwhile to ask if there is some way in which the one-to-one paradigm of individual treatment can be approximated in education. Indeed, in my opinion this is the central task before us; and it must be done without succumbing to the constant pressure for structural control and narrow role definitions.

The Idea of Extension Agents

Our criticism of existing models on grounds of inflexibility has been

prompted by our evaluation of an USOE-NIE pilot program consisting of extension agents who served almost a thousand clients in a two year period (Sieber, Louis, Metzger, 1972). As I hope to make clear, the key to the success of this experiment lay in its non-formal, non-specialized nature, making it possible to circumvent the organizational constraints and red tape of local and state educational systems.

Two extension agents in each of two states and three agents in a third stage were employed full-time to visit schools within specified target areas and to help clients identify and articulate their needs. The agents referred each need or request to a retrieval staff located in the state education agency who performed computer or manual searches of ERIC, CIJE and other, more standard resources. In addition, in many cases the agents supplied the clients with materials from their own offices, which were located in intermediate service centers. Information was provided in the form of abstracts, microfiche, bibliographies, hard copy, or even technical assistance from the state agencies. When appropriate the agents also helped clients to interpret or adapt the information, to assist in appraising its applicability, to consider needed steps for use or implementation, and then to repeat the whole process when needs became more focussed or shifted to other areas of interest. Note, however, that these tasks were to be performed only when required by the specific situation or client, and only when totally acceptable. In short, the extension agents were functioning as <u>free floating, full-time generalists</u> — an entirely new role in educational change which circumvents

traditional structures.

The target areas within the states varied in nature and scope. In one state they consisted of two counties, one rural and one a mixture of rural and urban; in another state, of three regions, all rural; and in the third state, of two school districts, one rural and the other highly urbanized. One agent was assigned to each target area, making a total of seven agents. There was a project director in each state, and from one to seven full-time retrieval personnel at the state level. One of the states used its own facility for computerized searches of ERIC, while the other two used a regional installation.

The retrieval service was also made available to educators who were not in the target areas served by the extension agents, giving us the opportunity to compare the outcomes of the agents' work with that of educators acting on their own. Further, the participation of consultants from the state agency and elsewhere made it possible to compare the effect of these subject matter specialists with that of the extension agents.

Despite a great deal of confusion and many false starts in the beginning of the program, the agents eventually proved to be quite effective in stimulating and guiding educational change. Those educators who requested resources on their own initiative were undoubtedly more motivated and more sophisticated in dealing with technical information, as shown by their higher organizational positions and educational levels. Nevertheless, the clients of the extension agents more often implemented the information in some way. Also, in areas of the three states where extension

agents were not available, but where the on-demand retrieval service had been publicised, only a tiny proportion of school personnel sought information for problem-solving (about .007 per cent). In the seven areas where the agents were found, however, much larger percentages used the service (ranging from 1.6 per cent in the city district to 13.5 per cent in one of the rural target areas).

A great deal of qualitative observation in addition to the statistical data demonstrated the impact of the extension agents. (For the full analysis, see Sieber, Louis, Metzger, 1972). Innovation included organizational changes as well as the practices of teachers and specialists because of the involvement of administrators in the change efforts of the extension agents. Fortunately, the program was conceived as a pilot project, which meant that a high degree of flexibility and experimentation were permitted. This provision made it possible to observe the effectiveness of many different approaches to the stimulation of change, and eventually to draw up a set of guidelines for future extension agent programs. But what is important to note here is that all of the approaches which were discredited in practice stemmed from efforts to structure or routinize the services rendered by the extension agents.

Few of the initial conceptions of how the agents were to perform their unprecedented role were borne out in practice. In one state, for example, the two agents were originally expected to implement a "management by objectives" program by focussing on helping clients achieve nine

state objectives. This expectation was completely abandoned within a year. As one superintendent flatly stated, "Those are the State Department's goals. We didn't participate at all in drawing those up." In contrast to this top-down strategy, another state expected its agents to "diagnose the problems" of educators, and in general to follow the problem-solving model advocated by Havelock (1969) from start to finish. But this goal also turned out to be utopian. Many clients were unwilling to undergo diagnosis, many had a specific need that did not require diagnosis, others had a deadline to meet and could not afford the time for diagnosis, and most resented the implication that they had "problems" in the first place. One agent spent several months trying to conduct a needs assessment, an exercise that only led to his expulsion from the district. As we state in the report:

> Most of (the field agents) agreed that unless the client himself was enthusiastic about engaging in an extended study of the problems that faced him, there was little to be gained from overt attempts to change the client's approach to the situation. Indeed, the state that originally placed the greatest emphasis on locating the root problem of clients later moved to a much more flexible view which takes into consideration such factors as variations in the needs of different clients and in their acceptance of diagnostic efforts.

In still another case an agent felt that he could best serve administrators, since he himself had been an administrator and had taught in a teacher training institution. As it turned out, however, he was more successful with teachers, and mamaged to alienate several superintendents who resented his posing as an expert. In fact, although all of the agents naturally drifted toward clients who occupied the positions

which they themselves had formerly held, they tended to have greater impact with other clients. This result raises some question about the desirability of specialization in dealing with clients according to common training and experience.

A typical bureaucratic perspective also prompted the agents to seek entrée to schools and to present the program through formal meetings. While this procedure created a certain minimal awareness of the service, it was soon discovered that restrictions on two-way communication, the reluctance of educators to mention their problems or needs in the presence of peers, and their over-exposure to new programs, projects, and practices in such meetings all conspired to defeat these initial efforts. Later on, small informal groups and personal solicitation under informal conditions (e.g., in the faculty rooms or local coffee shop) proved to be far more effective. In short, the formal, structured approach to discussing needs failed to have any impact, and in several cases only raised resentment.

Again, in all three states it was assumed that the "technical assistance" rendered by consultants from the state agency, intermediate service centers, or local districts would be especially effective and valued by clients. But as it turned out, according to our statistical analysis, the extension agents were equally appreciated and equally successful in achieving implementation. And with respect to state consultants in particular, the extension agents served more than ten times as many clients as did these experts. Although SEA consultants were viewed

as substantive experts, the results of meetings with them were often quite unsatisfactory. One client commented that diagnostic periods had been unproductive because the consultants had been unable to tell the group anything new; another stated that he felt the consultant team had been trying to give them a "hard sell"; and in another case, an extension agent commented that the consultant had lots of nice theoretical ideas, but few practical suggestions of relevance. And the problems of scheduling consultants and paying those from the university were insoluble. As one client observed:

> The main drawback with using state people is that when they are asked to come into the district they have to fit your request into their schedules, so that they may finally show up after the whole issue prompting you to call them has blown over.

This client then went on to pinpoint one of the major advantages of the free floating, full-time generalist:

> On the other hand, (the extension agent) is close to the problem, he can identify them more easily...and he responds to problems generally more quickly.

Certain bureaucratic features could not be totally avoided, however. The division of labor between extension agent and retrieval personnel was one of these, and this feature gave rise to a number of problems. The job of accurately communicating the client's need to the retrieval staff emerged as one of the toughest of all; and in a large minority of cases, the information delivered to clients was viewed as "not relevant to my problem or need." One can only speculate about the magnitude of this problem when <u>more</u> individuals, teams, and communication channels are added, as proposed in current models of change which

depend on a much more complex division of labor. Indeed, one of the three states that we evaluated introduced an elaborate division of labor within the retrieval component. Consequently, turnaround time for delivery of information was almost twice as long as in t e other two states, but without an equivalent increment in the clients' satisfaction or use of the information.

Another way in which structuring of the extension agent's role was attempted was through a special training program conducted by an independent contractor. Fortunately, two approaches were tried: a series of formal training sessions in a central location; and a series of informal encounters with agents during site visits of the training team. And on the whole, the informal approach was preferred by the agents. As one of them put it, "Basically, the trainers listened to me, then tried to offer the kind of help, information, or suggestions that were most appropriate...I'd have to take the on-site visit over the group meeting as most valuable to me." In short, clinical advice was valued more highly than formal training. Another felt that the most important lesson of training had been the importance of learning by trial and error, an ironic commentary on training programs: "I picked up the point that we should try for different solutions to problems — since we are a pilot project, it's good for us to try all sorts of solutions and methods, and pick those which work best for a given set of circumstances." In short, even a training program was perceived as unrealistic when applied to the actual day to day needs of these extension

agents, unless the training itself became highly interactive and flexible.

After many months of experimentation, the extension agents reached the conclusion that they must perform in a variety of capacities ranging from the most non-directive response to the client's request (the messenger boy), to diagnosis of underlying problems (the problem-solver), to the most directive kind of intervention (the advocate and leader). In short, they had to develop a repertoire of very different skills and to learn when to activate them. Combining the responsibilities of an information specialist and a process helper, rather than following the bureaucratic inclination to assign these tasks to distinct individuals, is especially important. In two of the states local "district representatives" were trained in areas not served by the extension agents to perform only the information referral activities. In brief, they helped clients to fill out a request form, routed the forms to the state agency, and followed up initial requests by ordering fuller or more specific information. Since they did not stimulate requests, their clients were self-starters. Thus, one would expect these clients to be strongly inclined to utilize the information in practice. But our data on satisfaction and implementation reveal that the local information specialists were far less effective than the extension agents who were often obliged to persuade their clients to try the service. Clearly, a mere information officer, no matter how appealing from a bureaucratic perspective, is not sufficient. But neither is a mere problem-solver or process helper. The responsibility of conveying information is necessary for the performance of other,

more active roles because it legitimizes the agent in the eyes of local educators. In essence, it helps him to gain credibility and entrée to the local school by dissociating him from the image of an advocate or a substantive expert who is somehow superior to school personnel.

The mere provision of information is not perceived as a status-threat. It does not preempt the status rewards that accrue from local self-help. Once an extension agent gained personal acceptance and demonstrated a grasp of the materials that were delivered to the client, therefore, he became attractive to school personnel as a collaborator in change. In contrast, persons who present themselves as "problem solvers" or "consultants" are often suspect from the outset. Even if they acquire external resources, they remain under suspicion of nosiness, advocacy, or remoteness from the real problem. The conveyor role, then, should be the primary role of the extension agent when establishing his identity. This requirement reminds us once again of the importance of integrating substance with problem-solving activities in all state and federally funded programs.

Clearly, the underlying lesson derived from this pilot program is the importance of flexibility. And because of the need for flexibility, the agent cannot afford to delegate his responsibilities or to specialize in any one type of clientele, problem, or area. (A possible exception is specialization according to primary and secondary levels.) Further, he must be able to shift rapidly from one activity or change strategy to another, to be familiar with all stages of a change process, and to get

in touch with educators elsewhere on very short notice. Only non-specialized, full-time individuals, not teams or committees representing different perspectives and having other role obligations, possess the requisite freedom of action to do these things. Further, an extension agent must not become dependent on the decision-making of permanent committees, although he may help establish such groups locally, advise them, and offer resources from a retrieval center. Nor should he be either completely internal or completely external to a particular district, but should be located in an agency which is intermediate between state and local education agencies. Only by occupying a boundary role, as sociologists call it, will he be able to integrate people, ideas, and agencies. And only by being independent of priority-setting bodies will he have the freedom of action that is required for responsiveness to individual educators.

It is noteworthy that an evaluation of another extension agent program by Herlig (1975) has pointed to the same conclusions. As Herlig asserts on the basis of survey feed-back from clients who were exposed to several types of information programs:

> The field based extension agent who can solicit and entertain requests for information administrators, teachers, and other school personnel should be viewed as a critical operative in the development of a viable information dissemination system. Data which permitted comparison of extension agent as opposed to local linker effectiveness pointed to a wide performance differential in favor of the former. In the content of this Project, the role of the extension agent could not be challenged as the most efficient purveyor of project services to client districts.

Elsewhere in the report a field agent himself notes that "working as a generalist seems to be more effective than working as a specialist," and that "the field agent is more effective working on a full-time basis."

Another component of our program that contributed to its success was, of course, the information retrieval system. While this component has not been discussed here, it should be borne in mind that an extension agent must ultimately depend upon the acquisition of an array of relevant resources, including how-do-to-it materials, state-of-the art reviews, conceptual papers, and kits of promising practices. This is the appropriate level for organizational routine. When possible, alternative solutions or materials should be made available to agents for delivery to clients; and the agent should have the opportunity to screen, interpret, and highlight relevant portions of documents in order to ease the burden on busy school personnel.

In conclusion, there is mounting evidence that the best way to serve the needs of educators in behalf of enlightened change is to adopt a highly flexible, inter-personal approach with a bare minimum of role preconceptions and organizational props. Models of planned change which are based on specification of role performance, specialization by subject matter or type of clientele, permanently operating structures with division of labor, priority-setting, coordinative mechanisms, and so forth, will not achieve the avowed goal of taking everyone's needs and circumstances into account and of permitting personal decision-making. (This does not mean that some monitoring is not necessary, but this should be done on a collegial rather than a bureaucratic basis.)

Moreover, the implementation of such models might not only be irrelevant but detrimental. By concentrating on a few issues which are deemed legitimate by organizational leaders at local, state or national levels, attention is diverted from the whole spectrum of individual and organizational needs.

And yet, despite the demonstrated worth of free-floating, full-time generalists as extension agents, virtually every federal, state and local program for educational innovation which is being promoted and installed today relies on the same routines of creating task forces, developing problem solving teams in local districts, retraining specialists or school personnel as part-time disseminators, and a host of other conventional managerial practices. The extension agent has been almost totally lost from view. In particular, there is now a strong movement to re-train SEA and other specialists to perform dissemination tasks as part of their regular jobs. The trouble with this approach is that existing roles and structures have a number of built-in obligations, habitual practices, and traditional perspectives which are not conducive to dealing with clients in new and highly flexible ways. But no doubt these approaches appeal to our sense of administrative order. They also attest to an interest in supplementing the shrinking budgets of SEA's by trying to utilize existing networks and personnel in a more efficient and accountable manner. In short, they reflect bureaucratic needs. What they do not reflect is a genuine interest in local educational assistance and in long term cost effectiveness.

Only by "end running" the bureaucratic educational maze will help be

brought to the local educator and will taxpayers' dollars be wisely spent. Not by more coordinating, targeting, re-treading, and so on, but by putting full-time generalists into the field who can pursue a contingency model, will meaningful assistance be forthcoming to American education on an unprecedented scale.

REFERENCES

Bargar, Robert R., 1975. "Facilitating Building-Level Problem Solving: Adopting Systems Design to Human Development." The Ohio State University.

Fullan, Michael, 1972. "Overview of the Innovative Process and the User," Interchange, 3 (2-3), 1-46.

Havelock, Ronald G., 1969. Planning for Innovation through Dissemination and Utilization of Knowledge. Ann Arbor: University of Michigan.

Havelock, R.G. and Havelock, M.C., 1973. Training for Change Agents. Ann Arbor, Michigan: Institute for Social Research, University of Michigan.

Herlig, R.H., 1975. An Overview of a Comprehensive Educational Information System in the State of Kansas. Topeka, Kansas: State Department of Education. Final Report of Kansas/Project Communicate, submitted June 1, 1975, to National Institute of Education (OEG-71-4646).

Louis, K.S., and Sieber, S.D., (forthcoming). The Dispersed Organization: A Comparative Study of an Educational Extension System.

Rogers, E.M., 1962. Diffusion of Innovations. New York: Free Press of Glencoe.

Schmuck, R.A. and Miles, M.B., 1971. Organization Development in Schools. Palo Alto, California: National Book Press, 1971.

Sieber, Sam D., 1968. "Organizational Influences on Innovative Roles," in Eidell, T.L. and Kitchel, J.M. (eds.), Knowledge Production and Utilization in Educational Administration. Columbus, Ohio: University Council for Educational Administration, 120-142.

Sieber, Sam D., 1974. "Trends in Diffusion Research: Knowledge Utilization," Viewpoints, Bulletin of the School of Education, Indiana University, 50 (3), 61-81.

Sieber, S.D., Louis, Karen Seashore, and Metzger, Loya, 1972. The Use of Educational Knowledge: Evaluation of the Pilot State Dissemination Program. New York: Bureau of Applied Social Research, Columbia University, 1972.